

## NEW ZEALAND

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### THE NATIONAL CONTEXT FOR DISTANCE EDUCATION

New Zealand society is passing through a challenging period as it attempts to respond to developments in the world economy. For the first century or more of European settlement in New Zealand, the economy was tightly specialized on the production of primary produce for the European market. From the introduction of refrigerated shipping, through to Great Britain's entry to the European Economic Community in the early 1960's, the export of wool, meat and dairy products to Europe accounted for over three quarters of New Zealand's overseas earnings. With a relatively small population, and an efficient farm sector, these overseas earnings supported a standard of living virtually unmatched during the 1950's. During the fifties and sixties New Zealand attempted to diversify into a range of manufacturing and service industries which were intended to replace imports from other countries. These industries grew under the protection of a comprehensive array of tariff barriers and other protective legislation. These industries provided New Zealanders with a period of virtually full employment from the end of the Second World War through to the mid seventies. The same period saw the expansion and consolidation of a comprehensive range of public services, and a social welfare system that was unequalled in its day.

But, while New Zealand built its manufacturing industries and public services during this post-war period, the terms of global trade began to shift. This shift has not been in favour of New Zealand. Along with other primary producing countries, New Zealand has been hit by a sustained drop in the value of commodities, and by declining access to its traditional European markets. During the sixties public expenditure began to exceed income, and the deficit had to be made up by international borrowing. New Zealand started to slip behind its trading partners in economic development as its economic structure became less and less appropriate to the international marketplace.

The worsening debt situation finally forced the Government to embark on a radical programme of economic and social reform in the mid eighties. The economic side of the policies, which were implemented first, were aimed at forcing the productive side of the economy to compete on the international market without the protection of the old tariffs and subsidies. This led to a major restructuring of farming and manufacturing with many thousands of jobs lost. From an unemployment rate of virtually nil in 1970 the level rose steadily to a rate of around 10% by the late 1980's. Simultaneously, the Government began to reduce its own direct involvement in the economy. Many government departments and services were corporatised and even privatised. Other government services were re-organized to achieve greater economy and accountability. More recently, driven by the need to reduce the public deficit, the Government has attempted to reduce its level of spending on social services. Increasingly, social spending is being targeted on the basis of need, with the consumers of such services being expected to assume the responsibility for a greater share of the cost.

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These economic pressures are being felt in education, and in distance education specifically. The Government is calling for an increase in education and training to service the anticipated growth of export-driven industries. But it is seeking this expansion at a time when fiscal pressures prevent a continued increase in public expenditure on education.

The population of New Zealand at the last census in 1986 was 3,307,084. At an annual increase of .8%, the population in 1991 stands at approximately 3,441,500.

New Zealand society has been becoming increasingly urbanized. Whereas in 1926 32% of the population were living in rural areas and 68% in urban areas, by the 1986 census, just 16% were left in rural areas with 84% classified as urban. This trend has been reflected in policies to amalgamate rural schools, and to bus remote children longer distances to school. This trend is also reflected in the demography of distance education enrollments. Increasingly, rural enrollments are the minority of distance education enrollments except in the school-level enrollments of the Correspondence School.

As well as the drift from country to city, there continues to be a strong drift from south to north. Auckland is New Zealand's fastest growing population centre, and accounts for one quarter of the total population. Smaller regional centres, especially those in the south island, tend to have very limited growth. Both these demographic features tend to be reflected in distance education enrollments.

People of European descent constitute the great majority of New Zealand's population. The Maori population suffered a major decline in the first century following colonization. However this trend has been reversed since the last world war, and today Maori constitute some 12% of the total population. This rapid recovery of Maori numbers means that Maori society is relatively young, and has a larger proportion of school-age children than does European or, as the Maori say, Pakeha society.

The other large element in the population are Pacific Islanders, some 100,000 residents and citizens coming mostly from the Cook Islands, Niue, the Tokelaus, Tonga and Western Samoa. Ethnic Chinese, both long time residents and new arrivals, and ethnic Indians, mostly from Fiji, make up the remaining significant groups.

During the eighties, small groups of Cambodian and Vietnamese refugees have arrived, along with growing numbers of business migrants from Hong Kong.

Until recently, English has been the official language of instruction in all public educational institutions for the past century or more. Since the mid-eighties New Zealand society has been re-evaluating its partnership obligations to the tangata whenua or indigenous Maori citizens. Protection and promotion of language is now seen as one of these obligations, and schools and tertiary institutions are being challenged to promote the use of the Maori language. An important breakthrough occurred in the early eighties with the development of a network of kohanga reo or Maori language nests for pre-schoolers. These were the first significant development of education in Maori in several generations, and have excited high expectations of similar developments at the school and tertiary levels. To date, developments at these levels have been slower. A handful of primary and secondary schools now operate in a bi-lingual or exclusively Maori language mode, and at the tertiary level, several small regional institutions are attempting to offer instruction in a bi-lingual mode.

These developments have yet to have much impact on distance education. Rather than offering courses in the Maori language, it is more likely that distance educational institutions will make their study materials available to the growing number of small, independent Maori educational institutions which are getting established.

After one hundred years of relative stability in organization and administration, public education in New Zealand is passing through a major structural re-organization. The founding legislation of 1877 set in place a tripartite system for primary education: a strong central department with wide funding and policy powers; a series of regional boards with responsibilities for school management and staffing; and individual school committees with relatively modest responsibilities for building maintenance and minor spending. The incorporation of secondary education in the state system came somewhat later in 1914. The secondary school, which had been operating as independent and local initiatives for many years, managed to avoid the control of the education boards, and for the next seventy years, reported directly to the Department of Education, or its regional offices.

University education in New Zealand began with the establishment of the University of Otago in 1869. Four years later the New Zealand University Act laid the foundation for a collegiate structure for any further development. The New Zealand University grew steadily during the first half of the century. At first it had four constituent colleges at Auckland, Wellington, Christchurch and Dunedin. Thirty years ago this structure evolved into one of separate universities operating under a University Grants Committee which was responsible for curriculum decisions as well as funding disbursement. The original four universities have been joined by Massey University, Waikato University and, most recently, Lincoln University. Teacher education was carried out in seven teachers colleges which were directly accountable to the state Department of Education.

Since the mid 1980's the education system has undergone radical restructuring. The central Department of Education has been reorganized as a ministry with policy advisory and funding responsibilities rather than system management functions. The middle order agencies such as Education Boards and the University Grants Committee have been abolished. Each educational institution, from the largest university to the smallest school, has been reconstituted as a body corporate with its own council or board of trustees broadly representative of parent or consumer viewpoints and fully responsible for the directions and activities of that institution. Boards have been required to negotiate charters with the Ministry of Education upon which all subsequent funding and evaluation will be based.

Tertiary education has been reorganized along similar lines. Universities, colleges of education and polytechnics now operate under a common funding regime. A national qualifications authority has been set up to approve and monitor all programmes, and to attempt to introduce greater portability of credits between institutions and levels. Most recently, a base-level system of banded institution funding levels and student fees has been introduced, with institutions being free to set their own supplementary student fees. The ground is set for a period of strenuous competition among educational providers.

The major media of communication have always been the subject of public control and policy. Until recently each communication medium has generally been the preserve of a government department which determined policy for the use of the medium and controlled access to it as well. The high level of state involvement ensured an acceptable level of service throughout the country, but may not have encouraged their most creative use by sectional groups such as distance educators. But since the mid-eighties, as part of the Government's policy of reducing its involvement in the marketplace, most communications media have been subject to de-regulation, corporatization, and even full privatization. The full impact of these moves on distance education can only be speculated upon, though some trends are already apparent.

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The dominant medium of communication for most of New Zealand's distance education institutions is print. The successful use of this medium depends on an efficient and reliable postal service. New Zealand has always enjoyed an excellent postal service, and indeed, the presence of a high quality postal service probably accounts at least in part for New Zealand's early involvement in distance education. Distance education providers are required to meet all postal charges as with any other customer. The New Zealand Correspondence School has always offered a free postal service to its students, but this has always been funded by a direct payment between the Education Department and the Post Office.

With one or two noteworthy exceptions distance education providers have made limited use of communication media other than print. In part this has been through deliberate choice on the part of the institutions; but in part too because access to these media was seldom easy for the providers. An exception was radio. For several decades the Radio In Schools programme provided supplementary educational programming targeted at schools. This programming and the broadcast time was made available as a public service by the New Zealand Broadcasting Corporation. Simultaneously, the Correspondence School embarked on a daily series of broadcasts to its pupils scattered throughout the country. The broadcast to schools were eventually curtailed but the Correspondence School continues to take an hour each day to make contact with its students. Broadcasting, along with other sectors of the government service, has now been de-regulated and corporatised, and Radio New Zealand is in the process of re-negotiating the terms of its broadcasting agreement with the Correspondence School. At present the Government is inclined to let such issues be resolved by the operations of the marketplace, but such a hands-off stance may well threaten this use of a public medium for distance education.

In the meantime, other providers of distance education have made very little use of radio. The development of FM radio has freed up time on the AM network, both nationally and locally, but little constructive use has been made of these opportunities for distance education.

One provider, Massey University, has made use of broadcast television over the past three years. But here again, this development has not been encouraged or supported by explicit government policy. The public television network, in an effort to reduce its costs, has sold the university an hour of broadcasting each week outside the normal viewing hours. Most of the major institutions have, however, made some use of videotape in their distance tuition. The Correspondence School provides a "video-letter" service to allow staff to correspond with individual pupils.

Telecommunications is another medium that is under-used by distance educators. Institutions pay their telephone bills like any other consumers, and this has served to limit the use of this medium. Otago University has developed its own distance teaching programme using the telephone system and a one-off start-up grant from the Government. But since then the university has received no special treatment, and currently finds it difficult to resource its teleconferencing service. Most of the other distance education institutions use teleconferencing to a limited extent, either renting Otago University's Unitel system by the hour, or dealing with New Zealand Telecom.

Computer communications are widely used in the commercial market, and Telecom, the newly privatized corporation responsible for telecommunications, is promoting this service energetically. Most distance education units employ computer telecommunications

for institutional purposes, but few extend this service to their students. Massey University has a policy of home-ownership of computers for some of its students, and has made a commitment to providing computer communications services for its distance education courses. The Correspondence School lends sixty laptop computers to upper primary and junior secondary students, and also teaches computing courses to senior secondary students with access to computers in their schools.

Fax is another medium that is widely employed at the institutional level but is only used to a limited extent to support distance teaching. A small number of students at each of the major distance education institutions submit their assignments by fax, with varying levels of encouragement from the institutions.

New Zealand is in the process of installing ISDN systems and capability in its telecommunications. Potentially this will open up a number of exciting possibilities for distance education; in particular for the development of videoconferencing and allowing student access to enormous databases. The University of Victoria in Wellington is piloting the use of this technology for distance education, but the pricing structures outlined by New Zealand Telecom make its use by distance education highly problematic for the immediate future.

## **HISTORY AND BACKGROUND**

One of the distinguishing features of distance education in New Zealand is that until very recently there has been only one major institutional provider in each of the educational sectors. Whereas in similar countries such as Canada, Australia and the United States there are literally dozens of institutions providing distance education, in New Zealand there has been just one institution providing distance education at the school level, another at the polytechnic level, a third at the university level and a fourth providing continuing education to teachers at a distance. The history of the development of distance education in New Zealand is essentially the history of these four institutions.

### *The New Zealand Correspondence School*

At the time of the 1877 Education Act the population of New Zealand was just half a million, two thirds of whom lived in rural districts. Successive governments attempted to build schools accessible to most children, but, inevitably there were many who lived beyond the reach of the most far-flung one-room schoolhouse.

It was pressure from rural parents, allied with the establishment of a correspondence school in Australia that led to the foundation of the New Zealand Correspondence School in 1922. The school opened with a roll of 167 children, a figure that more than doubled by the end of the first year. Right from the outset, enrollments came not just from rural areas but also from house-bound sick children and institutionalized children.

In 1928 a secondary division was established within the school which added fifty more pupils to the roll of almost 800. Initially the school could offer only a limited range of subjects, but as enrollments grew the range was progressively widened until it became the most comprehensive available in the country.

The teaching methods and support systems put in place in the early years have stood

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the test of time and remain the main elements of that institution's offering. Courses were largely print-based, relying on a steady stream of printed study guides or assignments flowing between the school and the individual students. These printed study materials have been augmented over the years with cassette tapes, kits of material for more practical subjects, musical instruments and even with computers in recent years - all sent out round the country in the familiar green canvas Correspondence School bags. The Correspondence School made early use of radio with the first broadcasts to students beginning in 1932. Sixty years later the school remains the only educational institution to make regular use of radio broadcasting on a national scale. Personal contact with students was limited until the thirties when some of the staff were sent around the country visiting students on an annual basis. This arrangement has since been formalized and now every region has its visiting teacher. Closer contact was obtained through the annual month-long residential school established at Massey Agricultural College in 1949, and continued every year since.

In the late 1940's adults seeking part-time enrollment, but unable to attend evening classes, started to enroll. In the early 1960's when single subject passes in the School Certificate and University Entrance Examinations became creditable, part-time enrollments soared. Within a very few years these adult enrollments represented the major portion of the enrollment.

Another developing role for the school was as a back-up service for small secondary schools unable to provide tuition in a wide range of subjects. Today, most New Zealand secondary schools have students enrolled with the Correspondence School for one or two subjects.

### *The Open Polytechnic of New Zealand*

During World War II provision was made for servicemen to begin or continue their studies towards a technical or vocational qualification through the Army Education and Welfare Service. At the conclusion of the war, the A.E.W.S. study course became officially the Technical Correspondence Institute with emphasis on the rehabilitation of servicemen. But so successful was the correspondence school courses that professional, trade and industrial organizations began requesting a wider range of subjects.

The Institute started in 1946 with a staff of four tutors teaching twelve subjects. By 1969 it had grown into an institution with 236 full-time tutors and 60 administrative staff, providing 603 different courses to more than 14,000 students. Growth continued at the same healthy rate, and in 1991 the institute, recently retitled The Open Polytechnic of New Zealand, had a staff of 500 and an annual enrollment of around 33,000 students.

In the early years of the Institute's work a considerable proportion of its students were apprentices taking compulsory theory courses as part of their trade training. By the late 1950's there was a growing need for well-trained technicians and the institute moved to meet this need. Gradually the balance of correspondence students swung from apprentice-level training to the more advanced technical and vocational qualifications. During the same period the technical high schools in the four main centres were reconstituted as technical institutes. For several decades these school had offered trade training through evening classes. Now they were able to focus all their efforts on this tertiary level of training.

### *Extramural University Courses*

Part-time study was a significant factor in the decision of the University of New Zealand to embark on extramural studies in 1960. Prior to this time the constituent colleges of the university had been forced to provide exemption from lectures to many students living in remote areas. The teaching profession added focus to this problem. During the 1950's New Zealand's primary school teachers were starting to upgrade their qualifications through part-time attendance at university. However, more than half of the country's two thousand primary schools were in rural areas and beyond easy access to the country's four university colleges. It was on the recommendation of the teachers' professional organization that the University of New Zealand finally recommended to the government that special provision for correspondence education be vested in a single university. Victoria University of Wellington agreed to take on this responsibility, and in 1960 a branch College was established in Palmerston North some 140 kilometers away.

The principles upon which the extramural courses were to be taught were to endure to the present day. The new institution was to offer tuition in the conventional contact mode as well as extramurally by correspondence; there was to be no differentiation between courses taught internally and extramurally; students in each stream would sit the same final examination; and they would be credited with an identical qualification. Only the mode of tuition was different with carefully constructed study guides and sets of readings replacing regular attendance at lectures, and annual residential courses of three or four days replacing weekly tutorials.

The extramural programme commenced in 1960 with five entry-level units in Education, History and Mathematics. A total of 510 students enrolled in that first year. The range and depth of courses continued to expand over the next thirty years. The original offerings in Humanities, Social Sciences and Education expanded steadily till most first and second year courses could be undertaken extramurally by the mid 1970's. These original faculties were joined by Business Studies in the early 1970's which has since grown to be the largest single extramural faculty, accounting for almost 40% of current extramural enrolment. During the first twenty years of the extramural programme students were unable to complete their degrees totally extramurally. They were forced to convert to individual study - either at Massey University or one of the other New Zealand universities - to complete their third year of undergraduate study. After much debate, both among the New Zealand universities and within the academic community at Massey University, the decision was made in 1978 to offer full degree programmes by extramural tuition. Since that time, virtually all the departments in the major extramural teaching faculties have offered full extramural majors, many offer extramural postgraduate diploma courses as well, and in recent years a small number of extramural master's programmes have begun. The faculties of Science, Technology and Agricultural and Horticultural Sciences offer somewhat smaller extramural programmes restricting their teaching in this mode to the introductory or advanced specialist diploma levels. By 1991 Massey University offered over 550 extramural papers contributing to seventeen degrees, twenty-eight diplomas and six undergraduate certificates.

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### *Advanced Studies for Teachers Unit*

In the decades after the last war the school system expanded rapidly to accommodate the baby boom children. Teachers colleges expanded their intakes to meet the demand, and by dint of cutting a few corners, the challenge was met in quantitative if not always qualitative terms. By the late 1950's the state Department of Education recognised that the teaching profession needed progressive retraining and upgrading and that the somewhat ad hoc system of annual refresher courses established during the 1940's could never adequately meet this challenge. In 1962 the Department of Education instituted a Diploma of Teaching which teachers could obtain by completing two-thirds of a university degree, or by completing one-third of a degree plus the equivalent of another third in professional courses. The latter were to be taught by a special division of the Correspondence School.

Development in the early years was steady rather than spectacular. In 1957 in its first year of operation, these correspondence courses for teachers attracted 527 enrollments. By the end of the decade the numbers had reached 1,248. During that first decade courses were written and taught across most of the subjects of the primary school curriculum. In addition, subjects such as "Education in the Junior School" and "Education in the Senior School" sought to broaden the perspective of teachers.

Following its initial decade as part of the Correspondence School, the small unit was given a little more independence and attached to the Wellington Teachers College. It still operated as an arm of the central Department of Wellington, but the newly titled Advanced Studies for Teachers Unit was able to develop its own style of operations.

During the 1970's as Massey University expanded its own extramural offerings for teachers one policy option that found some favour was to amalgamate the two sets of distance education courses. This did not happen however. During the late 1970's the Department of Education decided it was important to preserve an alternative form of retraining for teachers, and one that could be directed more easily to the purposes of the state than could an independent university. As a result an Advanced Diploma of Teaching was introduced, and the ASTU unit was expanded in role and size to take on a broader mandate. The number of courses and students both expanded considerably over the following decade.

In the early 1980's yet another physical shift saw the unit moving from Wellington to Palmerston North. This time the new host institution was the Palmerston North Teachers College, a regional institution with a close relationship with neighbouring Massey University. Again, there was some expectation that the two distance education institutions might achieve some kind of amalgamation. However, this process did not begin for another decade.

### *Monopoly of Provision*

Until quite recently, these four state institutions accounted for virtually all the distance education provided by public education institutions. The Department of Education was directly responsible for the funding of three of those institutions - the Correspondence School, the Technical Correspondence Institute and the Advanced Studies for Teachers Unit - and it was a deliberate policy to concentrate distance teaching in just one institution in each sector. At the university level, it was a deliberate policy of the University Grants Committee to concentrate distance teaching on Massey University, a decision that went unchallenged



until the mid 1980's. Monopoly of provision allowed each institution to grow steadily to a size where it could take advantage of the economies of scale that are possible in distance education. It also encouraged each institution to offer a comprehensive range of courses in the sure knowledge that this was the only chance of education for students from many parts of the country.

Less positively, monopoly of provision restricted involvement in distance education to a very small group of educators, and an even smaller group of policy makers. A common complaint of New Zealand distance educators is that central policy makers do not understand distance education, and that distance education institutions are forced to operate within policies and funding regimes designed for quite different modes of education. The monopoly of provision may also have failed to provide the competitive pressure necessary to encourage rapid innovation, risk taking strategies, and a willingness to adopt fresh approaches. This is certainly a claim that has been made in recent years by central policy makers who favour competition in all aspects of education. In any event, the monopoly of provision has been a singular and powerful influence on the development of distance education in New Zealand. It is also a theme that will recur later in the report.

## **THE LEGAL STATUS OF DISTANCE EDUCATION**

Distance education has developed in New Zealand without the benefit of specific enabling legislation. Until 1988 New Zealand had a single compendium Education Act which governed the conduct of most forms of public education. Subsections within the act set out the provisions for pre-school education, primary schooling, secondary schooling, technical education and teacher education. Little mention was made of distance education within this act. This meant that the Correspondence School and the Technical Correspondence Institute had the same legal status as a conventional school and technical institute respectively. This was not a satisfactory situation as the general provisions of the Education Act clearly did not meet their distinctive missions or structures. For example, both institutions were obliged to operate under the same school terms as conventional institutions, effectively closing operations for at least two months each year. This was, and remains, an inappropriate requirement for an institution such as the Technical Correspondence Institute/Open Polytechnic which has always worked to a system of continuous student enrollment and self-paced study. Likewise, the internal organization and staffing arrangements of each institution were determined by legislation and regulations designed with conventional schools and technical institutes in mind.

Massey University operated under its own act of Parliament. In most respects this act mirrored the legislation applying to its sister universities. But additional legislation made specific mention of Massey's role as a distance education institution. The main thrust of this legislation was to clarify the relationship between the six universities with respect to extra-mural education and to assist with credit transfer between the two modes.

Over the last few years a series of major administrative reforms has completely transformed the governance of public education in New Zealand. These reforms have been designed to promote greater accountability of educational providers to their communities and consumer groups; to reduce the complexity and sectoral fragmentation of the old system; and to promote more effective management of educational institutions. The last three years have

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seen the implementation of these three broad aims. The old Department of Education has been totally restructured with a view to shifting its role away from the provision of educational services to those of policy advice, resourcing and monitoring. Middle range levels of educational governance, such as the twelve regional school boards, and the University Grants Committee have been scrapped. Each educational institution has been required to establish its own board of trustees to be fully responsible for the management and direction of the institution. The initial and critical responsibility of each new board has been to draw up a charter in cooperation with the new Ministry of Education which states the contractual obligations of the board and the state to provide educational services to its particular community.

At the tertiary level the same broad changes have been introduced to the patterns of institutional governance. There has been an additional effort to reduce the sectoral fragmentation between universities, teachers colleges and technical institutes. The Government hopes to achieve this in a number of ways: through competition and contestability among institutions wherever possible; through the creation of a national qualifications agency with power to accredit most tertiary courses; and through the standardization of tertiary funding across the different types of institution.

This time of national restructuring of education has had its impact on distance education. The Correspondence School and The Open Polytechnic have been set loose from their old dependency relationship with the Department of Education. Each now has its own Board of Trustees which is fully responsible for setting directions for the institutions, appointing the Chief Executive Officers, and fulfilling the commitments of their respective charters. Massey University has also had to reconstitute its Board of Trustees and assume some of the responsibilities previously vested in the University Grants Committee. But unlike the Correspondence School and the Open Polytechnic, which look forward to a greater level of autonomy under the new arrangement, universities can anticipate more central direction from the Ministry than they experienced before. The Advanced Studies for Teachers Unit may feel the impact of the reorganization more strongly than any of the other three major providers. Under the new funding and governance arrangements, all tertiary institutions must stand or fall in a competitive environment. Many smaller tertiary institutions such as regional technical institutions and colleges of education, are being driven to amalgamate with large regional institutions. The Palmerston North College of Education, which is the institutional host for the Advanced Studies for Teachers Unit, has come to an agreement with Massey University to work towards amalgamation between the two institutions. So, some twenty years after this possibility was first mooted on educational grounds, it is coming about for funding reasons.

The new administrative environment is also intended to encourage diversity and competition among educational providers. The Government has withdrawn its protection of the monopolies the major institutions enjoyed over distance education. Virtually all the New Zealand universities are now involved, albeit still in a small way, with distance education teaching of various kinds. Several of the countries polytechnics have plans to offer their own distance education programmes. Both Massey University and The Open Polytechnic have collaborative relationships with regional institutions to combine the best features of the two modes of delivery. And both institutions are offering their production and administrative infrastructures to assist other institutions to offer courses by distance means.

## OVERVIEW OF THE CURRENT SITUATION

In an earlier section it was claimed that the history of distance education is best understood as the history of the service provided by the four main institutional providers: the New Zealand Correspondence School, the Centre for University Extramural Studies at Massey University, the Advanced Studies for Teachers Unit, and The Open Polytechnic of New Zealand. There is a fifth significant provider which should also be mentioned. That is University Extension at the University of Otago. There have been other initiatives besides these five and in the future there may be many more providers, but for the moment at least, a description of the services of these institutions provides a useful framework.

### *The New Zealand Correspondence School*

#### *Aims and Objectives*

All publicly funded education institutions are now required to negotiate a charter with the Government. These charters must indicate the goals and objectives which the institution undertakes to pursue and which the Government undertakes to fund. These goal statements cover the full operation of each institution and therefore only those sections that relate specifically to distance education are mentioned here. They include those sections of the School's formal objectives that have to do with the distance education curriculum, establishing a partnership with the school's community, and meeting the School's commitments to the Maori people under the terms of the Treaty of Waitangi of 1840. The latter is the founding document of New Zealand's nationhood, and represents a commitment to partnership between the indigenous Maori people and the newly arrived European settlers, or Pakeha.

#### *Control, Organization and Management Structure*

The Correspondence School is the largest school in New Zealand, and until recently it had a system of internal organization very similar to any other school. This has now been modified to reflect the requirements both of the new education reforms and of distance education as a distinct mode of delivery. The Board of Trustees has been reconstituted to reflect the full range of student and parent interests. This has posed an expensive challenge for the School as the membership of the Board is now distributed throughout New Zealand.

There is a Director and Associate-Director. Reporting directly to them are Principals or Assistant Principals responsible for the divisions of Early Childhood Services, Primary, Special Education, Secondary, and Adult and Open Learning. The Resident Teachers, who are scattered throughout the country, constitute another division. The Special Needs division is further divided into a section which addresses special learning needs of groups of handicapped students, and another which sets up individual programmes for students who require such specialized treatment. There is one further division - the Secondary Schools Group - which manages the study programmes of the 5683 students who are attending regular schools but who are also enrolled for one or more Correspondence School subjects.

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In addition to these teaching divisions there are two large divisions providing administrative and technical support. These are the Education Resources Division - which is subdivided into the Planning and Development, Production and Management sections - and the Personnel, Finance and Operations Division which includes Computing Services.

The Correspondence School has a staff of 542 comprising 342 in the Secondary Division, eighty-four in the Primary Division, seventeen in the Pre-school division, ten Resident Teachers, nine staff members supervising Correspondence School units, and ninety-one administrative staff.

One of the most significant organizational developments in recent years has been the implementation of management information systems and student information systems. The School now has an integrated system which links the services of student enrollment, student records, student assignment flow and marks, and materials production and dispatch. The School is currently embarking on a study of its costs in order to better manage the entire production and servicing of distance education.

### *Funding*

Historically, the Correspondence School has been funded directly from the government through an annual allocation determined by the old Department of Education. In fact, until very recently, the Correspondence School was a division of the Department of Education. Under the new reorganized system of educational administration the Correspondence School has been given an independent status and, presumably, independent, formal-based funding. This transition has proved problematic as the Government is reluctant to fund the School at the rate prevailing for conventional education. A series of reviews have endeavored to identify the true costs of distance teaching through the Correspondence School, and the School has been forced to accept some major cuts to its funding, particularly to its Adult and Open Learning enrollments. In the meantime the School is in the process of negotiating an explicit and stable funding basis, probably formula-based, with the Ministry of Education.

The Correspondence School has an annual budget of US\$ 18 million. School-aged pupils pay no fees. Adults who are citizens or permanent residents pay a fee of US\$ 52, a figure that represents no more than 10% of the full cost of each course enrollment. The Correspondence School has been gearing itself up to accept off-shore, full cost enrollments and a range of fees have been prepared. For example, full course enrollment for an intermediate school pupil (junior high school) would cost \$US 1825, and a single subject taken at the secondary school level would cost \$US 418 or US\$ 475 depending on the level.

### *Geographical Coverage and Enrollment*

At mid 1991 the enrollment of the Correspondence School stood at 19,529 comprising 510 early childhood pupils, 1,118 special education, 1049 full-time primary, 1,222 full-time secondary, 6,266 dually enrolled secondary and 9,331 adult part-time students. In terms of ethnic composition, 88.8% were European/Pakeha, 7.3% were Maori, 2.5% were Asian, 1.3% were Polynesian and .7% were other races.

The Correspondence School has a national and international catchment with students enrolling from towns and cities as well as from the remotest corners of the country. Many of the Special Needs students are hospitalized or house-bound. The School also serves a number of children temporarily overseas with their parents.

### *Instructional Systems*

Print-based correspondence materials have always been the principal teaching medium for the Correspondence School. All units are prepared by Correspondence School staff. Unlike dual mode systems such as Massey University where course development is very much an individual process incorporating regular, even annual, upgrading and revision, the Correspondence School adopts a systematic team approach to course development involving a considerable allocation of time and money. It generally takes two years from the start of the planning process to the completion of materials production. This process will have involved several stages of approval and editing, and will have involved a wide array of subject and technical specialists. Most courses cost over \$US 60,000 to develop through to the printing stage. This investment of time and money means that course revisions must be planned carefully. About 30 of the school's subjects or courses are revised in any year, as part of a planned eight year programme to revise all courses regularly. A special feature of the School's programmes is the interactive approach to teaching which enables teachers to select, adapt and supplement courses according to students' progress and achievement.

Correspondence School courses make use of a relatively large number of small posting. Each unit will require some form of assignment or other response from students. Teaching staff take an active role in pacing their students through a course, providing encouragement and feedback through their marking and correspondence. Many courses will involve kits of learning materials. For example, students studying woodwork or craft courses will receive a supply of wood or other building materials, as well as a set of tools. The School makes heavy use of audiotapes, both on an individual and a class basis, so many teachers will send a taped response to a student's work as well as their written response. In recent years the School has held a pool of laptop computers which it sends out to students in selected courses. Teleconferencing and direct telephoning of individual students are both used to help support and encourage school pupils studying at a distance. The use of radio has been mentioned already, and this medium helps to keep the Correspondence School in the mind of the public.

The School has always attempted to support its pupils at a regional level. This is done through Resident Teachers offering a visiting service to students in every corner of the country, and also through the ten Correspondence School Units which serve as local study centres for the School. An annual school camp is held at Massey University to give children an opportunity to meet their teachers and their classmates, and to develop some of the social and group skills they cannot learn purely by distance means. Some thirty seminars are held each year in the four main centres for senior secondary students. And over fifty school days are organised throughout the country for students and parents of all ages to participate in group educational, recreational and social activities.

## *Distance Education in Asia and the Pacific*

### *Massey University*

#### *Aims and Objectives*

The aims and objectives of the Massey University extramural studies programme are incorporated in the university's Interim Charter. This document contains a series of statements about paramount educational purposes, institutional purposes and quality education which make no special mention of distance education. Massey is a dual mode institution, and general statements of institutional purpose apply equally to extramural and internal teaching.

#### *Control, Organizational and Management Structure*

Extramural teaching takes place within a multi-layered system of control and management. The outside or top level concerns the relationship between the university and government; the second level concerns the systems of academic governance operating within the university; the third level concerns the control and management of the extramural studies programme within the university; and the fourth level concerns the management systems in operation within the Centre for University Extramural Studies.

As outlined in previous sections, all publicly funded educational institutions are required to have a board of trustees responsible for institutional governance. The Massey University Council fills this role and is responsible for appointing the Chief Executive Officer or Vice-Chancellor. The old University Grants Committee has now been abolished, so the university deals directly with the Ministry of Education on funding and policy matters. A Vice-Chancellors' Committee has taken over some of the vestigial roles of the grants committee, particularly in the areas of inter-university cooperation on curriculum and credit transfer matters.

The university has a system of collegial governance typical of most New Zealand universities. The basic organizational unit is the academic department. Departments are aggregated together into faculties. Each faculty has a dean to manage its affairs, and a faculty board to approve the academic programme. An Academic Board comprising all professorial staff meet regularly to consider the academic proposals of faculty boards, advised by a standing sub-committee comprising the deans of each faculty. The recommendations of the Academic Board then proceed to the University Council for final consideration. Resourcing, staffing and long term planning issues tend to fall outside this process of formal committee deliberation. Instead, such issues are handled by the Chief Executive Officer, with the assistance of Associate Vice-Chancellors, senior registry staff and various advisory committees.

The Board of Extramural Studies is a standing committee of the Academic Board and comprises representatives of each of the university's faculties. It recommends approval of the annual extramural programme, and is responsible for all extramural policy. The Board is chaired by the Director of Extramural Studies. The Director is also responsible for the management of the Centre for University Extramural Studies. The Centre, or CUES, is a registry-type unit dedicated to assisting teaching staff with the organization and servicing of

their extramural courses, and to assisting extramural students in their dealings with the university.

The Centre has three operating divisions: Teaching Resources, Regional Services and Administrative Services. The Teaching Resources Division integrates the work of a small team of Extramural Teaching Consultants (or course developers), editors, word processors and a materials production coordinator. The Regional Services Division comprises a manager, a campus-based course adviser, and five regionally-based extramural coordinators who provided a variety of support services for students in their home region. And the Administrative Services Division handles the organization of campus-based residential courses, extramural examinations, the provision of special services for students with special needs, the receipting and handling of student assignments, the multiple copying of audio cassettes and computer discs, and the storage and dispatch of teaching materials to students.

Other administrative and support services for the extramural programme tend to be supplied by central university units servicing both the extramural and the internal programmes. Examples of these would include the Registry which handles student enrollment and academic records, the university printery which produces all text-based teaching materials, and the university's own television production unit which produces extramural television as well as video to support internal teaching.

### *Funding and Costs*

The funding of university extramural tuition has recently undergone significant changes. For the past decade or more New Zealand universities have operated on an EFTS-based funding system, but one that has been mediated by a block grant funding mechanism operated by the NZ University Grants Committee. The funding formulas placed subjects in bands depending on their cost of teaching, with humanities, business studies and social sciences in the lowest funding band, the sciences and applied sciences in progressively higher funded bands, and veterinary, medical, dental and pharmacy courses at the highest funded levels. Funding for extramural tuition was calculated at the appropriate band rate, but then discounted by 20%.

In late 1990 the Ministry of Education changed the funding system so that all extramural enrollments generated equivalent funding regardless of the subject being taught, and that this funding be equivalent to the rate payable for the lowest funding band for university tuition. The full implication of this move have yet to be seen. Certainly, the applied science faculties of Technology and Agricultural and Horticultural Sciences will be less enthusiastic about teaching in the extramural mode now that this generates only about half the level of funding that conventional tuition does.

Massey University operates with an annual budget of US\$ 57 million, of which some US\$ 37 million is generated in EFTS-based government funding, US\$ 8 million comes from student fees, US\$ 5 million comes targeted to capital funding and the balance comes from research grants, endowments and other sources. The allocation of funding within the university broadly conforms to the patterns of funding forthcoming from bulk grant income, with the lion's share of it going to teaching departments in salaries and maintenance. The Centre for University Extramural Studies, and the administrative and production services directly attributable to extramural teaching account for some US\$ 1,115,000 of expenditure each year - half of which goes to the salary bill for CUES.

## *Distance Education in Asia and the Pacific*

A study of the unit cost involved with extramural teaching conducted in 1988 suggests that the cost of preparing a typical course was about US\$ 15,000. An estimated course life of five years yielded an amortized annual course production cost of US\$ 3,000. Further analysis suggested that the fixed costs in offering a course in any year were some US\$ 15,000. A further cost of US\$ 115 per course enrollment was incurred as a variable cost. At that time, course fees and EFTS-based bulk funding ensured an allocation of approximately US\$ 450 per course enrollment. This meant that extramural enrollments in any course had to exceed 40 before that course became cost-efficient. Inflation since 1988 will have lifted these costs by at least 20%, and the basis for government bulk funding has changed somewhat. Nevertheless the distribution of broad costs remains valid, as does the identification of the break-even point between funding and costs.

This pattern of costs is common among dual mode distance education institutions: a relatively low average course development cost balanced against somewhat higher annual teaching and servicing costs. This reflects the limited assistance available to individual extramural teachers in the preparation of their course materials, but the personal involvement they retain in every aspect of the teaching and servicing of the course in operation.

## *Geographical Coverage*

Massey University is the main institutional provider of university-level distance education for the whole of New Zealand, so it draws its students from throughout the country. While it was originally intended that extramural tuition should be available for students living beyond the reach of conventional universities, this pattern has changed over the years. Now the majority of extramural students live within easy travelling distance of a metropolitan university but have other commitments which prevent them from studying in the conventional mode.

## *Instructional Systems*

Massey University offers some 500 extramural courses each year. These are offered over the full year, starting with a summer enrollment during January and February, and concluding with final examinations in October and November.

Most courses will have a single academic course controller. That person will be responsible for planning the course, preparing the draft study material, setting and marking all student assignments and the final examination, organizing and teaching at any campus-based residential courses or regional courses, and for responding to communications from students. The course controller will receive assistance from CUES in preparing, wordprocessing and editing draft study material. CUES will also relieve academic staff of much of the organization and communication associated with examinations, residential and regional courses, and the flow of student assignments. But, compared with most single mode distance education institutions, the academic course controller carries very wide responsibility for the operation of the course.



Most extramural courses are print-based combining two or three study guides with sets of readings reproduced from the literature. These packages of material are prepared through the CUES wordprocessing unit and then printed through the university's own printery. While there are two extramural teaching consultants to offer assistance in this course preparation process, most academics produce their own draft material. While it is difficult to generalize about the instructional design of such a devolved process of course preparation, it can probably be claimed that most academics follow Holmberg's model of "the guided didactic conversation".

This model lends itself well to the dual mode of teaching, and allows academics to submit their course material to a process of constant revision.

Courses tend to rely heavily on written student assignments. These are submitted according to a schedule of deadlines, and marked by the course controller in most cases. Courses with enrollments greater than fifty - which only account for about a third of the courses - will normally employ part-time markers to assist with this process.

At least half of all extramural courses incorporate a residential component of three or four days on campus in Palmerston North. This provides an opportunity for students to undergo a period of concentrated study with their teacher and classmates, and to be introduced to study media and methods not possible through the use of print. More than half of these residential courses have a compulsory attendance requirement. Over the past decade, staff responsible for the larger enrollment courses have been encouraged to schedule a series of regional weekend courses instead of these campus-based courses.

Audiotapes are used by about a third of all courses. These are generally produced by the course controllers themselves with some technical help from central staff. A much smaller, but growing, number of courses use home-based computers in the extramural teaching, supplying discs to students through the mail. Progress is being made on networking student computers for teaching purposes. Television provides supplementary instruction and support for about ten percent of all extramural courses, mostly those with larger enrollments.

Massey University has avoided a study centre approach to distance teaching, preferring to support its students from the centre. Exceptions to this rule would include the half dozen departments which employ part time tutors in the regions, the five regional offices which are supplying general study advice and support to extramural students, and two or three joint teaching arrangements entered into between the extramural programme and regional tertiary institutions.

### *Enrollment*

There were 15,391 students enrolled extramurally in 1991. These students enrolled for 26,550 student/paper enrollments, or an average workload of 1.7 papers. This compares with an internal student enrollment of 7,901 students enrolling for 48,140 student/paper enrollments, or an average workload of 6.1 papers.

The extramural enrollments are spread across seven of the university's eight faculties. The faculty of Business Studies has the largest extramural enrollment with 40% of the entire extramural enrollment; Social Sciences, Humanities and Education have large programmes as well with 29%, 13% and 8.5% of the total extramural enrollment respectively; and the

### *Distance Education in Asia and the Pacific*

three remaining faculties of Science, Agricultural and Horticultural Sciences and Technology have smaller programmes with 5%, 2% and 1% of extramural enrollment respectively.

No reliable data are available on rates of graduation from Massey University's extramural programme. Most students move between non-distance and distance education during their university programme, and many transfer enrollment and credit from one New Zealand university to another. Data is available, however, on individual course completion rates. The student withdrawal rate for all extramural courses was about 17% in 1988. This is a very conservative estimate of student wastage, as many distance education students fail to inform the university of their intention to withdraw. If those students who fail to complete (Did Not Complete - DNC) the requirements of the course are added to this dropout tally the rate climbs to 36%. These rates are higher at the introductory 100 level with a withdrawal rate of 19%, and 42% when the DNC students are added to the list. Retention rates tend to improve at the more advanced levels, and third year (300 level) courses have a withdrawal rate of just 14%, rising to 24% when DNC students are added.

### *Advanced Studies for Teachers Unit*

#### *Aims and Objectives*

The Palmerston North College of Education, which is the host institution of the Advanced Studies for Teachers Unit, has recently negotiated its charter with the Ministry of Education. In Section 1 of the charter which deals with the mission, objectives and delivery systems, there is no explicit mention of the unit or of distance education. In the second section where the distinctive character of the college is described, mention is made of the distance education programme, and the nationwide commitment of the institution to serving the professional education of teachers.

#### *Control, Organization and Management Structure*

The Palmerston North College of Education is a body corporate with its own Council and Principal. The main function of the College is to provide teacher education to primary and secondary school teacher trainees from the immediate region. Most of the systems and structures of the college are designed to serve these conventional teacher education programmes.

The Advanced Studies for Teachers Unit has a quite separate clientele and mission from the rest of the college, and the organization and staffing of the unit reflect these distinctions. The Unit has a Director who is accountable to the College Principal. Apart from a small number of clerical staff, the unit comprises about a dozen course developments and teaching staff. Their primary role is to plan and develop distance education courses for teachers; to contract other members of teachers college staff to write distance courses and monitor those contracts; to participate in the teaching of some of the distance courses, and contract other staff to teach the remaining courses; and to ensure that all the administrative and servicing arrangements are in place. The Unit draws on the administrative and clerical services of the College Registry for wordprocessing, student enrollment and printing.

In organizational terms the Unit falls half way between the dual and the single mode. It is dual mode to the extent that the College of Education offers both a conventional and a distance education programme, many of the administrative staff service both the internal and the distance programme, and some of the co-opted course developers and tutors for the distance programme are also heavily involved with internal teaching. But it is single mode to the extent that the Unit has a staff dedicated to the distance education programme, the two diploma courses are not taught in the face-to-face mode within the college, and the Unit has been able to establish many of the systems and procedures of single mode distance education teaching.

The two principal programmes offered by the Unit are the Advanced Diploma of Teaching and the Higher Diploma of Teaching. These were established by the central Department of Education as an alternative route to university study for teachers wishing to continue their professional education. Most student teachers are able to combine their college education with course work towards a BEd or similar qualification at their local university. The Advanced Diploma and the Higher Diploma of Teaching offer teachers a choice of how they wish to proceed with their professional education once they are out in the schools. As a broad generalization, university courses in teacher education tend to take an analytical approach grounding their study in the social sciences. The Higher and Advanced Diplomas on the other hand tend to focus on school curriculum areas and the professional skills required for teaching and administration.

Each of the six colleges of Education offers courses towards these diplomas, but only Palmerston North College offers them by distance education.

### *Financing*

The Unit operates within an annual budget of some US\$ 1,300,000. Something under half this amount is taken up with the salaries of unit and allied staff. A smaller fraction is set aside to contract outside staff to prepare course materials or to tutor and mark existing courses. And the remainder is taken up with the normal costs associated with distance education viz. materials preparation, printing, warehousing and dispatch, communication with students, production of alternative media, regional travel and institutional overheads.

Student fees contribute something less than US\$ 230,000 of this sum, the remainder being generated by EFTS in terms of bulk funding from the Ministry of Education. Since 1990 bulk funding of ASTU students has been pegged to the basic extramural rate of funding available to all the distance education institutions. This means that the students attending the Palmerston North College of Education as face-to-face students generate a higher level of bulk funding than do the distance education students. The medium term implications of this disparity of funding is not clear.

### *Geographical Distribution*

As with the other major national providers of distance education, the ASTU draws its students from throughout the country. The distribution of students parallels that of the general population with a slight bias in favour of rural areas.

## *Distance Education in Asia and the Pacific*

### *Instructional Systems*

The College has an Academic Programme Board which approves the annual round of course offerings. This board is representative of college staff, teachers' unions and student groups. In planning for new courses the Board must operate within budgetary limits set by the College, and the relatively flexible framework set by the diploma regulations. Once the decision to offer a new course has been made, a course writer or developer is selected. This person may be a member of the Unit staff, a member of the wider College staff, or perhaps someone not associated with the college at all. If the Unit is forced to go outside the institution to find a writer then it will establish a formal commercial contract for the job. The writer will meet with an advisory group for that subject to clarify the objectives of the course, establish the major themes to be covered, and come to some initial decisions about modes of teaching and resources needed. This committee will normally involve one or two members of the Unit staff who will subsequently act as coordinators and editors for the course, some representatives of the particular professional area or curriculum subject in question, and sometimes a representative from the Ministry of Education or appropriate sub-section. The writer will then be given six to twelve months to get the material to camera-ready state. This process will involve regular meetings and consultations with the coordinator, and an acceptance of the guidelines established by the advisory group. The draft material will be edited within the Unit, and then sent out to an independent moderator working on a contract basis.

The course development guidelines are relatively firm but skeletal. That is, there will be clear limits on the numbers of study guides and assignments that will be permitted, on the size of those study guides, on the number of readings that may be attached, and on the level of difficulty and appropriateness of the material. Some guidance will be available on the style of presentation and writers will be expected to identify their instructional objectives throughout the course. However, the instructional design contribution is relatively unobtrusive, and there is scope for course writers to put their personal stamp on a course. The Unit takes the issue of copyright seriously, requiring authors to cede the copyright of all course materials to the Unit, and ensuring that copyright clearance is obtained for all material used.

Most courses have two postings, generally with no more than one or two set text books. These are posted out to students at set points through the year. The typical course will require students to complete four written assignments. These too will be given submission deadlines which correspond with the progress of the course. Most ASTU courses have an examination at the end of the year. The role of the course examiner is decided each year, and where appropriate, contracts are issued both for the writing of the examination paper and the marking of scripts. Until 1990 the examinations were arranged by the School Examinations Section of the old Department of Education. The new Ministry of Education has shed this role to the National Qualification Authority, so the Unit has approached Massey University about providing examination facilities for its courses.

Most courses are allowed to run for five years without major revision or rewriting. The original course writer may continue with an involvement in the course, perhaps as a tutor or examiner. Just as often, these duties will pass into other hands.

The major supplement to print-based material are face-to-face study groups organized

in local areas and sometimes even in schools. The Unit employs local tutors to support these groups.

### *Enrollment*

In 1991 there were 1950 students enrolled across about 60 distance education courses offered by the Unit. These were virtually all part time students of the Unit. Around 60% of students were full-time employees of public schools, another 20% were full-time employees of private schools and institutions. Fully 85% of students were women which is a direct reflection of the gender proportions in primary school and pre-school teaching which contributes most of the enrollments for the Unit.

It is difficult for the Unit to calculate graduation numbers. Students commonly combine courses taken by distance through the ASTU with those studied in the conventional mode through one of the other colleges of education. Some two thirds of students enrolling for ASTU courses successfully complete those courses.

## *The Open Polytechnic of New Zealand*

### *Aims and Objectives*

The Open Polytechnic has recently undergone a major re-organization. That re-organization followed a comprehensive review of the objectives, structures and processes of the entire institution of the following objectives or goal. The institution arrived at a mission statement: "to specialize and provide leadership in vocational and continuing education using distance and open learning methods". The institution also committed itself to a set of goals.

### *Control, Organization and Management*

The Polytechnic is a body corporate operating under the Education Act 1989 and its subsequent amendments. The institution is governed by a Council established under the authority of the Education Amendment Act 1990. There is a Chief Executive Officer responsible for managing the administrative and academic affairs of the institution. The Council has set up an Academic Board and three Advisory Committees which report directly to it. These are in relation to three of the larger teaching programmes of the polytechnic: the National Diploma in Accountancy, the National Certificate in Business and the National Certificate in Business Computing.

At the beginning of 1990 The Open Polytechnic (TOPNZ) implemented a new organization structure. This involved a move from a structure which had a Principal, First Deputy, Second Deputy, Registrar and fourteen Heads of teaching departments to a divisional structure with Directors of functions such as Corporate Services, Education Services, Human Resources Development and Delivery, and Deans of the four new faculties of Applied Technology, Commerce, Engineering Technology and General Studies. The faculties are

### *Distance Education in Asia and the Pacific*

divided into 50 sections with a staff of over 400 tutors supported by 120 ancillary staff. An early issue for the new structure has been the challenge of establishing an integrated computerized management information system. This has been a major undertaking as the institution moved from a manual system that had operated for many years with individual tutors being responsible for enrollments with no central records being kept.

### *Financing*

The Open Polytechnic is reliant on EFTS-generated bulk funding and student fees for its income. The former amounted to approximately US\$ 12 million and the latter to nearly US\$ 3 million in 1990. Operating costs were around US\$ 15 million with over US\$ 13.5 million going to salaries.

Changes in tertiary funding policy have affected The Open Polytechnic more than most. Until recently TOPNZ has operated under an annual allocation from the Department of Education which has appeared to disadvantage it in relation to other polytechnics. The move to an EFTS-based funding regime should enable TOPNZ to plan for the future on a more secure and predictable basis than in the past.

### *Enrollment and Geographical Distribution*

The Open Polytechnic accepts enrollments throughout the year, and most courses are self-paced. This means that it is not an easy matter to calculate numbers of students at any given moment. The Ministry of Education has approved funding for 5388 EFTS for 1991. By the end of July the actual EFTS were 4089, with another 600-900 EFTS expected before mid-November. These EFTS translate into approximately 35,000 course enrollments.

As with the other national distance education institutions The Open Polytechnic draws its enrollments from throughout New Zealand. The enrollment patterns tend to follow the general distribution of population with around 19% of students coming from Greater Auckland, 13% from Wellington, 7% from Christchurch, 3.5% from each of Whangarei, Dunedin, Nelson, Napier/Hastings and Tauranga, and the remainder from smaller towns and rural areas. In spite of the fact that there are polytechnics in most regional centres, TOPNZ draws 75% of its enrollments from urban areas. Half of all TOPNZ students are younger than 30, and 65% are male. At present little information is available on the income levels of students.

The ethnic distribution among TOPNZ students broadly reflects that of New Zealand as a whole. Eighty-two percent of students were European/Pakeha, 6.5% were Maori, and the remainder were Chinese, Indian, and various Pacific Island nationalities.

### *Instructional Systems*

The Open Polytechnic offers 800 courses towards 333 programmes. Most of these programmes are at trade, technician and professional levels. They range from watchmaking to boilermaking, from hairdressing to accountancy.

Most TOPNZ courses are print-based. In the past, course materials have been developed largely by teaching staff working within broad format and production guidelines. In 1990 an Instructional Design Unit was established, and staff from this unit are developing policy and procedures, and beginning to operate a team approach to course development. The new approach to course development will begin with instructional design, proceed on to course writing, and then undergo an evaluation and editing phase before the physical preparation of camera-ready material. TOPNZ courses tend to have about a dozen study units in each course. Students are sent these units one at a time, and they are generally not sent the next unit until they have completed and returned the attached assignment. These written assignments are an integral feature of the TOPNZ teaching process, and every effort is made to return all assignments within the working week.

In most courses students can enroll at any time during the year, and their rate of progress is entirely self-paced. Examinations tend to occur at set times during the year, and these will tend to influence the pace and timing of study for many students. Continuous enrollment and relatively self-paced study do introduce an important element of flexibility into students' study. But they also mean that it is difficult to identify a cohort of students for any course, and therefore almost impossible to organize any face-to-face tuition for students. Students are encouraged to phone or write to their tutors for guidance on course-related matters, but they seldom get an opportunity to meet other students studying the same course.

The Open Polytechnic is beginning to broaden its approach to distance teaching; firstly by seeking to develop opportunities for students to have some direct contact with each other and with tutorial staff at a regional level; and secondly through the developing use of interactive communications technology. There is enormous scope for The Open Polytechnic to collaborate with regional polytechnics in the servicing of each others' students and courses. Already regional polytechnics make considerable use of TOPNZ course material. More recently, The Open Polytechnic has been exploring ways in which local polytechnics might provide direct support for its students. One way has been to appoint regional coordinators to advise students, and to coordinate with regional polytechnics in whatever joint servicing arrangements can be developed.

The Open Polytechnic is also planning to utilize a number of the new communications technologies. Computer communications and videoconferencing are two that may be developed in the near future.

### *University of Otago*

#### *Aims and Objectives*

University Extension has its own section in Otago University's Division of Academic Services: Strategic Plan 1990-1992. This is a more detailed statement of objectives than can be found in the University's draft mission statement. Nevertheless, this latter document makes a specific commitment to "continue[ing] the expansion of the Distance Teaching Programme which meets a need for professional development and community education which cannot be met by internal courses".

## *Distance Education in Asia and the Pacific*

### *Control, Organization and Management*

Otago University has a similar system of governance to Massey University. Like Massey University, Otago University is a dual mode institution, teaching both in the conventional and the distance mode. Distance teaching is organized by University Extension, a unit with responsibility for continuing education as well. The head of the Distance Teaching Unit reports to the Director of University Extension who reports to the Assistant Vice-Chancellor, Academic Services Division.

University Extension has a combined staffing entitlement of eighteen staff, most of whom work within the Distance Teaching Unit. The latter has five main sections: network management and operations which is responsible for the teleconferencing operation; network technical development; teaching materials preparation and dispatch; distance credit course enrollments and records; and course operations including print editing and programme design. University Extension draws upon the University Registry for financial control, but manages its own student enrollments and examinations.

### *Financing*

As with other dual mode distance institutions, most of the costs of distance teaching at Otago University is carried by academic teaching departments in terms of staff time. Central servicing costs amount to about \$US 640,000 per year. Half of this amount is taken up with salaries; the other half is expended on the teleconference network and the other administrative, materials production and course servicing functions common to any distance educational operation.

### *Geographical Distribution and Enrollment*

In 1991 there were 960 students enrolling for 1935 paper enrollments. The distance education programme, both regional and national, included eighteen credit programmes and sixty-one papers. Some of these programmes were only available on the Regional Network which comprised thirteen teleconferencing sites in the Otago and Southland regions. These courses tended to be the degree-credit courses in humanities and social sciences. Other courses were available on the National Network which comprised teleconference sites in twenty-five towns and cities throughout New Zealand. Many of these course were post-graduate courses in medical, dental or pharmaceutical areas. Others were targeted at specific vocational options such as occupational health practice, theological studies, biotechnology, community nutrition, and fitness management. In addition to the sites shown, the Distance Teaching Unit also teaches through teleconferencing in Hong Kong, Perth, Sydney, Melbourne and Launceston (Tasmania).



### *Instructional Systems*

Although the teleconference is at the heart of the Otago University distance teaching programme, several other kinds of course material are supplied. The bulk of subject content is usually covered through print and audiotapes. Videotapes, slides, resource kits and other packages of various types are also provided in some courses. Distance students also have access to the library.

Teleconferencing is used to promote tutorial discussions among students. Staff at the Distance Teaching Unit offer guidance and support to academic staff in the use of this medium, and considerable effort is made to make maximum use of the interactive qualities of the medium.

## **COMMON ISSUES**

### *International Affiliation and Cooperation*

All the major providing institutions are members of the Distance Education Association of New Zealand (DEANZ). This is a general membership organization rather than an institutional membership organization, but all five institutions have given sustained support. The annual conference is the major forum for distance educators in New Zealand and attracted a registration of 250 in 1991.

Most of the institutions are also members of the Australian and South Pacific External Studies Association. ASPESA was, in fact, the parent body of DEANZ, and institutions find it useful to maintain this trans-Tasman link. Several institutions and a number of individuals are also members of the International Council for Distance Education, and half a dozen people or more will attend each international forum of that body.

UNESCO has had a significant interest in distance education and within the region the Asia and Pacific Programme of Educational Innovation for Development has been the focus of most of that work. The Centre for University Extramural Studies at Massey University, The Open Polytechnic Zealand and the Correspondence School have all been institutional members of the National Development Group for UNESCO and APEID for many years. Under the aegis of APEID the distance educational institutions have hosted many international workshops and conferences as well as contributing to numerous workshops and consultancies within the Asian and Pacific region.

The Commonwealth of Learning is a new focus of interest and commitment for New Zealand distance education institutions. Already, senior staff have participated in several workshops and consultancies for the COL.

Individual institutions have affiliation to sectoral distance education groups. For instance, the Correspondence School is a member of the Australian Association of Distance Education Principals.

## *Distance Education in Asia and the Pacific*

### *Research*

It is not possible to do justice to the research undertaken into distance education in this monograph. This research tends to fall into three kinds. Firstly there is the institutional research undertaken both systematically and on a more occasional basis. All institutions carry out research on the nature of their student population, on their levels of satisfaction, and on indicators such as student retention. They also tend to research their costs, their options in communications technologies, the effectiveness of their systems for quality assurance, production and delivery. Much of this research is of a high order of sophistication, but of relatively low general interest, with the result that it tends not to be published. Some of this research work is of interest to the distance education profession at large and may be presented as papers at conferences. The proceedings of DEANZ conferences, and ASPESA and ICDL forums would be the major repositories of such research. Thirdly there have been a small number of graduate research theses completed on distance education, and these would be available through the ERIC database and similar systems. Finally, a very few attempts have been made to publish fuller, more reflective studies of various aspects of distance education in New Zealand. One such would be "Campus Beyond the Walls" by J.M.R. Owens, a history of the first twenty-five years of Massey University's extramural programme.

### *Growth and Expansion*

There are a number of developments occurring in New Zealand's larger distance education institutions which are intended to improve the range and quality of the offerings. These include a more explicit focus on instructional design and materials preparation, a new interest in marketing and promoting the available service, and the introduction of integrated management information systems. Most providers are continuing to increase the choices available to students with a broader array at each level, and the development of advanced level and postgraduate distance education courses at both Massey University and The Open Polytechnic.

The existing large providers have a major investment in distance education and retain their effective monopolies on the field. Nevertheless other tertiary educational institutions are expressing interest in distance education and are beginning to mount programmes. Several polytechnics and universities are hoping to offer their specialty subjects to a wider, national audience through distance education. At the moment both The Open Polytechnic and Massey University respectively are negotiating with these institutions to assist them to do so. Likewise, these two institutions are exploring joint teaching partnerships with regional institutions to allow the latter to offer more advanced-level and specialist courses on the foundation of distance education materials.

The Government and a number of social commentators are calling for a freeing up of educational provision through open learning. Most of the distance educational institutions are able to provide at least some of the features of open learning - in particular, open admission, self-paced study, alternative teaching media and flexible learning methods. It remains to be seen how far distance education institutions are able to modularize their offerings to allow a full measure of learner-directedness.

One significant development is the blurring of the distinction between distance education and conventional education. Several institutions are using a mix of teaching modes, incorporating block courses as well as printed study materials, supplementing their conventional study programmes with distance education study materials, or using communications technology to move into multi-site teaching. This latter development could become more significant in the next decade. Financial pressures may well force some smaller regional institutions to amalgamate with larger institutions. This will encourage the use of communications technologies such as videoconferencing, electronic blackboards, satellite communications, and multi-media applications. These moves will receive a boost from site based industrial and professional training. Already many of the vocational programmes offered by Massey University and The Open Polytechnic are sponsored by professional and trade associations. The recent experience in Australia would suggest that large industrial enterprises will look to distance educational institutions to assist with staff training. Such training is likely to be technology intensive.

Off-shore marketing of distance education has been relatively slow to develop. Confusing signals from government over fee levels, coupled with concerns over issues such as copyright and the establishment of adequate systems to service such enrollments, have all contributed.

Finally, there will almost certainly be greater competition in the field of distance education over the coming decade. Under the new operating environment, the old institutional monopolies have gone, and institutions are free to select the mode that suits them best. This will mean there will be competition from conventional providers venturing into distance education, from commercial vocational colleges now competing for government support for their programmes, from overseas distance education providers, and from each other as the distinctions between the various sectors starts to erode.

### *Challenges and Problems*

The distance education providers consider that New Zealand lacks an explicit policy on distance education and that provision suffers from this lack. This may be a function of the very small number of institutional providers in New Zealand, and their relative invisibility in policy terms. It is true that distance education institutions must operate within policies designed for conventional institutions. This has meant, for instance, that The Open Polytechnic and the Correspondence School have continued to operate within a conventional academic year with lengthy term holidays which cut right across the continuous study programmes that both institutions are committed to; it means that Massey University has no special allocation for expensive communications equipment, but must constantly lobby government to preserve the allocation of capital monies for buildings; it means that the Correspondence School is subject to regular assessments by inspectors and reviewers who know a great deal about conventional schools but not very much about distance education. Current government thinking is to encourage a level playing field for all institutional providers of education, so the prospects of getting targeted policy are not good.

Funding remains problematic for most distance education institutions. The recent decision to peg EFTS-generated funding for distance education students at the lowest cost category will certainly discourage the expansion of distance education into the applied

### *Distance Education in Asia and the Pacific*

sciences, medicine, and veterinary studies which would all need the application of more expensive communications technologies, and the provision of laboratory and practical components.

Competition among distance education providers may not be wholly beneficial either. The market for distance education is not infinite in New Zealand, and a proliferation of providers could quickly degrade the economies of scale already achieved by the large providers.

Finally, all the major providers remain the victims as well as the beneficiaries of their histories. They have structures and systems designed thirty, fifty and more years ago. They have large staffs, extensive programmes and huge enrollments. In short they have considerable momentum and a fair measure of inertia. It is not a simple matter to change the culture or structure of a large and complex educational institution. Most of New Zealand's distance education providers are undergoing searching reappraisals of their goals, their systems and their effectiveness. This is leading to important changes in all these elements, but it is not being achieved without considerable effort and some trauma.

New Zealand has been singularly well served by its distance education institutions. They have provided an extraordinarily comprehensive range of study opportunities for students at all levels in the education system. Their quality is high, and their qualifications have always been accorded equal credit to those of conventional institutions. They have been committed to providing access to students from throughout the country and from all conditions of life. And they have provided this service in an effective and cost-efficient way. The serendipitous policy to establish a single monopolistic provider in each sector of education has had a good deal to do with these outcomes. The big challenge for New Zealand's providers of distance education in the future will be to make sure that they continue to serve the needs of a constantly shifting market. This will demand continued attention to quality, a willingness to compete both nationally and internationally, and a tolerance of constant change and development.

### **BIBLIOGRAPHY**

The following bibliography is not a comprehensive list of publications in the field of distance education in New Zealand, simply a list of source material which charts the institutional and historical development of the field.

Bewley, D.R. "Correspondence as the Core: The Centre for University Extramural Studies, Massey University". D.C.B. Teather, ed. MDBO/Towards the Community University: Case Studies of Innovation and Community Service. London: MDNM/, Kogan Page. 1982.

Bewley, D. "New Zealand: Complementary 'Qualified Monopolies'". Kevin Smaith, ed. Diversity Down Under in Distance Education. Australia: Darling Downs Institute Press. 1984.

Freyberg, P.S. "Part-time Higher Education by Correspondence: A Case Study of Three Tertiary Level Schemes in New Zealand". Paper presented at the Conference on New Institutional Models for Higher Education, East-West Center, University of Hawaii. 1970.

Hawke, G. "Report of the Working Group on Post Compulsory Education and Training" (The Hawke Report). Wellington. 1988.

Owens, J.M.R. Campus Beyond the Walls: The First 25 Years of Massey University's Extramural Programme. Palmerston North: The Dunmore Press. 1985. Prebble, T. "If They Play as Mean as They Talk: Some Implications of the User Pays Approach". Distance Education. Vol.9, No. 1. 1988.

Tate, O. Review of the Correspondence School Accommodation, Staffing and Method of Operation. Wellington. 1987.

Tate, O. "Monitoring and Evaluating the Performance of a Distance Education Institution". Paper presented to 13th World Conference of ICDE, Melbourne. 1985.